

Service Manual

AC Power Pallet

22.07.2005

Revision Level:3

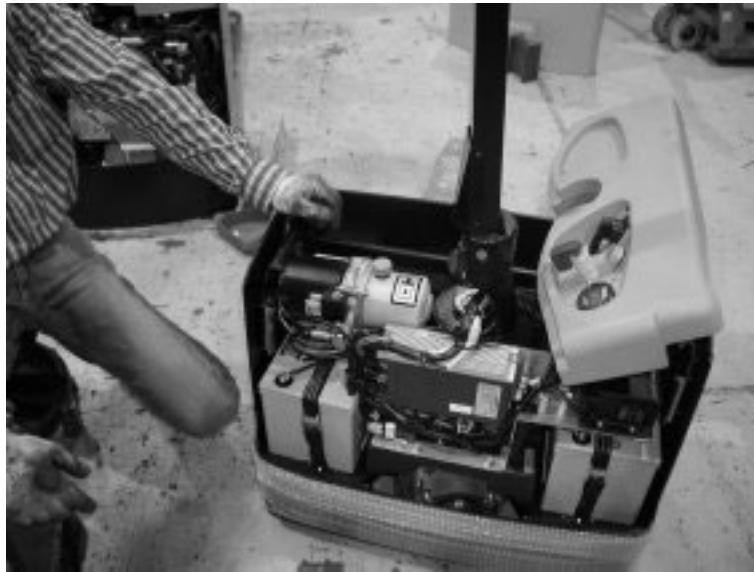


Figure 3.10. Hydraulic tank location (1,300 kg capacity truck model)

On 1,600 kg and 2,000 kg capacity truck models, the tank is installed vertically, and it should be filled to three-quarters ($\frac{3}{4}$) of the capacity when measured from the bottom of the tank to the bottom edge of the filling tube.

the truck is stationary, as the electrical brake should be engaged. The sequence of pins 3 and 4 depends on the direction of travel. They could, for example, indicate the following sequence: first pin 3, then both pin 3 and pin 4, then only pin 4, then neither, then pin 3 again, and so forth.

4.3.2.14. Parameter 50: Connector X5 (diagnostic)

This parameter displays the active pins of connector X5. The possible displayed pins are 3, 4 and 6. Pin 3 indicates that the tiller arm is in the driving position. Pin 4 indicates that the status LED is illuminated. Pin 6 indicates that the tiller arm is either in the upright or in the bottom position.

When the truck is powered on and no faults have occurred, the status LED should be constantly illuminated, that is, pin 4 should be constantly displayed. If a fault has occurred, both the status LED and pin 4 flash in a pulse sequence that indicates the fault type. In other words, the error code can be counted from the sequence.

Move the tiller arm between the upright and bottom positions to check that the tiller switch works correctly. When the tiller arm is in the upright or bottom position, pin 6 should be displayed and the truck should not respond to driving commands, unless the brake release button is pressed.

4.3.2.15. Parameter 51: Connector X6 (diagnostic)

This parameter displays the active pins of connector X6. The possible displayed pins are 2, 3, 4, 5 and 12 (C=12). Pin 2 indicates that the digital input for the forward driving direction is active. Pin 3 indicates that the digital input for the backward direction is active. Pin 4 indicates that the digital input of the safety switch is active. Pin 5 indicates that the digital input of the brake release button is active. Pin 12 indicates that the optional digital input is active.

When the truck is driven, pin 2 or 3 is displayed to indicate the driving direction. Pin 4 is normally displayed and disappears when the safety switch is pressed. Pin 5 appears when the brake release button is pressed to enable traction even when the tiller arm is in the upright or bottom position. Pin 12 (C) is displayed constantly, as it is an optional pin that has been hardwired to the 24-volt supply.



Figure 6.2. Removing the drive wheel fixing screws on 1,300 and 1,600 kg capacity trucks

6. Lift the truck from under the chassis using a suitable jack so that the drive wheel is lifted off the supporting surface.
7. Remove the old drive wheel.
8. Attach the new drive wheel.
9. Replace all truck covers and test the operation of the drive unit.

6.1.2. Replacing the load wheels

The load wheels are located near the ends of the forks. Their main purpose is to support the weight of the load. Depending on the truck model, there is either a single or a double load wheel in each fork.

To replace single load wheels:

1. Loosen the locking pin from the axle using a 5 mm pin punch. The locking pin is located on the outside end of the axle.

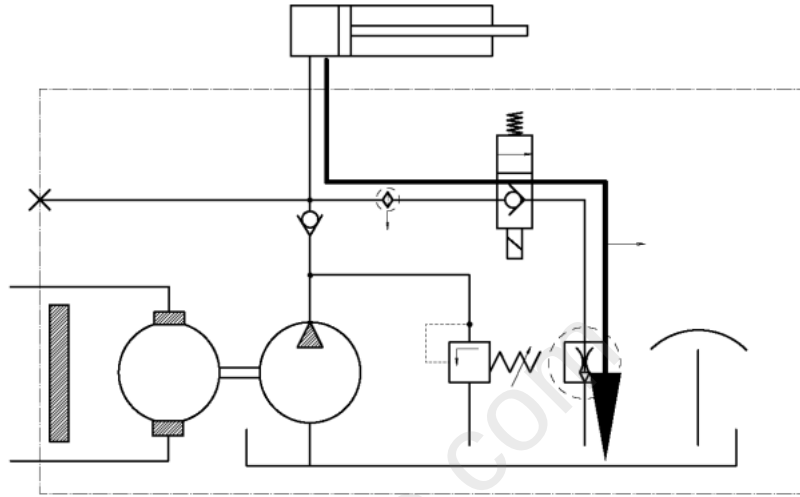


Figure 5.3. Hydraulic fluid flow during lowering

Various truck models can have different configurations of the hydraulic system.

5.2. Hydraulic maintenance and repairs

The following sections illustrate various hydraulic maintenance procedures not covered in *Chapter 3 Regular maintenance*.

5.2.1. Replacing gaskets

NOTE When the gasket of the hydraulic cylinder needs to be replaced, the wiper and guide strips are also replaced.

To replace gaskets:

1. Pull out the piston rod from the cylinder.
2. Remove the wiper from the cylinder using suitable pliers.
3. Pull the old gasket carefully out of the cylinder.

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Caterpillar NNPP16M Pallet Truck Service, Operator and Schematic Manual (WHSM0001)

Caterpillar NNPP16M pallet truck service manual, covers hydraulics, drive unit, controls, and schematics. Searchable PDF download.

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